Request for Proposals (RFP)
i-STEM 2016 Strand Providers

A. Overview

We are currently seeking proposals from individuals interested in presenting a strand at the 2016 i-Stem Summer Institutes, where we will continue to focus on integrated STEM, the Common Core curriculum, and Next Generation Science (and Engineering) Standards. We are accepting proposals from individuals, groups, or organizations interested in presenting a theme based strand during the 2016 i-STEM Summer Institutes**.** Institutes will take place at the College of Southern Idaho (Twin Falls), Idaho State University (Pocatello), North Idaho College (Coeur d'Alene), College of Western Idaho (Nampa), Eastern Idaho Technical College (Idaho Falls), and Lewis-Clark State College (Lewiston). The strands (***week long short courses of about 20 hours of contact time***) are to be designed to increase the participating educators' STEM content and pedagogy knowledge as well as teachers ability to effectively integrate STEM and the practices of the Idaho Core Standards and the Idaho Science Standards which are based on the Next Generation Science Standards to assure our students are prepared for the workplace of today and tomorrow. Proposal submissions for presenters must be uploaded to the i-STEM web site at the following link prior to December 1.
http://www.sde.idaho.gov/site/istem/teachers/events.htm

The following are tentative sites and dates for the respective 2016 i-STEM Institutes:
>   North Idaho College: June 20-23
>   Lewis-Clark State College: June 20-23
>   Eastern Idaho Technical College: 21-24
>   Idaho State University: June 27- June 30
>   College of Southern Idaho: June 27- June 30
>   College of Western Idaho: June 27-30

B. Strand Provider Requirements

1. All Strand Providers must focus their content on integrated STEM themes or related concepts and model how teachers can integrate Math, Science, Engineering, Technology, Idaho Core Standards, and Next Generation Science Standards to meet the needs of their students and future workforce needs. In addition, strands should emphasize the 21st Century practices.

2. Each strand will provide about 25 hours of inquiry-based, project-based, STEM integrated, hands-on minds-on engaging instruction and curriculum, modeling and applying best instructional practices that are linked to Idaho Core Standards and Next Generation Science Standards. The 25 hours of curriculum will be integrated into the full conference agenda.

3. You and your participants will be receiving a video camera and movie editing software. You will be responsible for including this element in your stand. Describe how you will implement and embed this in your strand. Provide an activity idea you would embed.

4. Describe how you will work with strand participants and principals to follow up on strand content implementation during the school year. How are you preparing the strand participants to engage in the school year implementation and reflect on the outcome? (share video, reflection on video, suggested modification, and differentiation)

5. Strands will provide each participant in their respective strand a hands-on instructional kit, which includes activities and materials, valued at approximately $200 to infuse lesson and activities taught during the institute. Funding for the kits will be provided by i-STEM. Kits will be distributed to the participants at the institute or their order for a kit (orchestrated by the strand provider, including shipping costs) will be completed at the institute.

6. Strand providers will be expected to attend a one day seminar organized by the i-STEM Center Committee at Boise State University after the first of the year (2016). This training is mandatory for all strand providers to clarify expectations, demonstrate lessons and activities, receive training on the device that will be given to participants, prepare for kit ordering, explain the research expectations, and answer questions. More information will be forthcoming to selected strand providers.

7. Curriculum strand providers are expected to integrate and participate in all conference activities and will be responsible for supporting institute planning time sessions.

8. If selected, strand providers will design a **content knowledge test** specific to the STEM content of their strands which will be submitted for review and administered pre- and post-strand instruction. Our goal is to document how the strand increases the participants' STEM content knowledge (knowledge of science, technology, engineering and mathematics). We will survey the participants to determine the impact on their content pedagogy.

9. All strands are expected to organize at least one off-site instructional **field trip** that supports the content in their respective strands. In the submission process, potential strand providers will need to describe the field trip they propose to use for their strand participants.

10. Each strand selected will need to **identify businesses and agencies** that may serve as business partners or co-presenters in their strands. (e.g. guest speakers, field trip suggestions, instructional material providers, in-kind support, etc.)

11. Each proposal must also identify three primary learning objectives that participants in their strand would accomplish and be able to immediately integrate into their instruction and curriculum.

12. All chosen strands will meet the following criteria:
    1. **Inquiry Based Learning** activities are integrated throughout the program (hands-on / minds-on activities)
    2. **Cross Curricular** application is included in the course based on a STEM theme
    3. **Project Based** activities are integrated throughout program
    4. **Assessment** of student learning will be discussed, proposed, refined, and planned
    5. **Alignment** to Idaho Core Standards and Next Generation Science Standards particularly the *practices*.
    6. **Model Integration** of STEM in the curriculum to meet a wide range of learning standards and objectives
    7. **Focus on 21st Century Practices** which are aligned with the needs of society and the STEM workforce
    8. **Connect to the Local Community**, using a place based approach to provide context for the STEM content

13. In April, strand providers are expected to contact registered participants in their respective strands with information such as strand lesson plans or overviews, contact information or related materials to review prior to the institute. More information on this requirement will be given at the training. Strand registration begins March 1.

C. Proposal Submission

During the electronic submission process the following are key items to pay attention to.

1. All proposals must include the following elements and be electronically submitted by December 1, 2015.

2. Name of the Strand with a clear description to help participants in the selection process. The description should include the **target audience and/or grade level** for that specific strand, such as; K-3, 4-6, 7-9, or 10-12. There is a first choice and second choice option.

3. A summary of the proposed strand (1-2 pages) and a draft agenda for the four (4) day institute. Include brief explanations of the activities participants will engage in to learn content material. These explanations should include:
    - ✓ Agenda for the four days (25 hours instruction)
    - ✓ Sample Lesson Plan
    - ✓ Strand Overview including daily objectives
    - ✓ Sample of pre and post outcome assessments
    - ✓ Any special classroom equipment needed
    - ✓ List of potential off-site field trips
    - ✓ Top 3 takeaways (goals) for participants
    - ✓ 5 key descriptor words for proposed strand

4. Describe how you will implement and embed the use of the video camera and editing software in your strand. Provide an activity idea you would embed.

5. Describe how you will work with strand participants and principals to follow up on strand content implementation during the upcoming school year.

6. List the strand's instructional kit contents and cost per individual items. Provide an explanation of how teachers will be trained in the institute to implement kit materials. Kit value should be approximately $200 and should be distributed at the institute.

7. Explain how you will model effective integration of Math, Science, Engineering, Technology, Idaho Core Standards, and Next Generation Science Standards in your strand. We want you to talk and model effective cross curricular activities, practices, and strategies that will build teachers' capacity to effectively integrate STEM in their classrooms.

8. A short explanation on how you plan to integrate the practices of: STEM, Idaho Core Standards, Next Generation Science Standards, focusing particularly on the practices.

For those strand providers who have presented multiple times at the same institute, please give consideration to presenting at a new location or presenting a new content strand.

D. Proposal Submission Link

Individuals desiring to submit a proposal may do so by completing the application at the following link: http://www.sde.idaho.gov/site/istem/teachers/events.htm and uploading their submission automatically. If you have questions with uploading the application, contact Bill Cairns at cairbill@d91.k12.id.us for assistance, however, note all submissions must be completed at the above link.